

## **Project Report**

### **Data-Driven Innovations in Supply Chain**

#### **Management with qlik Insights**

##### **1.Introduction:**

This project aims to revolutionize supply chain management through data-driven insights using qlik. Leveraging advanced analytics, it seeks to optimize logistics, forecasting, and inventory management, enhancing operational efficiency and responsiveness.

##### **1.1 Overview:**

This transformative project endeavours to reshape the landscape of supply chain management by harnessing the power of Qlik's data-driven insights. Employing cutting-edge analytics, it strives to revolutionize key facets such as logistics, forecasting, and inventory management, with the overarching goal of elevating operational efficiency and responsiveness to new heights.

##### **1.2 Purpose:**

Qlik's advanced analytics features to analyse historical logistics data, identify patterns, and optimize transportation routes. Implement real-time tracking and monitoring solutions to enhance visibility into the movement of goods, reduce lead times, and minimize transportation costs. Implement real-time analytics to facilitate quick decision-making in response to unforeseen events or changes in demand, ensuring a proactive and responsive supply chain.

##### **1.3 Technical Architecture:**

The study emphasizes the positive impact on logistics optimization, forecasting accuracy, and inventory management efficiency. Moreover, it delves into the broader landscape of data-driven supply chain

transformations, exploring diverse analytical techniques and technologies. The findings showcase successful implementations, demonstrating notable

improvements in operational efficiency and responsiveness across various industry sectors. In addition, it examines the challenges and opportunities associated with the adoption of data-driven insights in supply chain contexts. The literature emphasizes the need for organizations to develop robust data governance frameworks and cultivate a data-driven culture to fully unlock the potential benefits.

## **2.Problem Understanding:**

- Create visualizations to showcase the demographic distribution of Supply chain management
- Explore any correlations between usage and improvements.
- Analyse how Data-Driven Innovations in Supply Chain Management have affected businesses, especially in sectors like banking, telecommunications, and e-commerce.
- Evaluate the impact of Data-Driven Innovations in Supply Chain Management on sales, customer onboarding, and operational efficiency.

### **2.1Business problem:**

This transformative project endeavours to reshape the landscape of supply chain management by harnessing the power of Qlik's data-driven insights. Employing cutting-edge analytics, it strives to revolutionize key facets such as logistics, forecasting, and inventory management, with the overarching goal of elevating operational efficiency and responsiveness to new heights.

### **2.2Business requirements:**

Implement a robust data integration strategy to aggregate and centralize relevant data from diverse supply chain sources. Utilize Qlik's advanced visualization capabilities to create intuitive and dynamic dashboards providing stakeholders with clear insights into the entire supply chain ecosystem

### **2.3 Literature Survey:**

A literature survey on the project theme of revolutionizing supply chain management through data-driven insights and advanced analytics reveals a growing body of research and scholarly articles focused on similar endeavours. Studies underscore the increasing recognition of the pivotal role

that data analytics plays in transforming traditional supply chain processes. Research highlights the effectiveness of leveraging advanced analytics tools,

such as Qlik, to enhance visibility and decision-making in supply chain operations.

### **3. Data collection:**

Data collection is the process of gathering and measuring information on variables of interest in an established, systematic fashion that enables one to answer stated research questions, test hypotheses, evaluate outcomes, and generate insights from the data.

#### **3.1 Collect the dataset:**

Dataset can be collected by downloading the dataset by click the link in the dataset icon. After done the kaggle login your files will be download then, you need to upload it into the github page.

#### **3.2 Collect the data with qlik sense:**

Then open the Qlik cloud by login into it. And, then extract the file to upload into qlik cloud by click on +Add data.

The screenshot shows the Qlik Sense web application. The main view displays a data table titled 'dataco supply chain' with 13 columns and 6 rows of data. The interface includes a top navigation bar with tabs for 'Prepare Data manager', 'Analyze Sheet', and 'Narrate Storytelling'. A right-hand panel shows 'Recommended associations' with 1 total table and 0 recommendations. A 'Load data' button is visible in the top right corner.

Type	Days for shi...	Days for shi...	Benefit per o...	Sales per cu...	Delivery Status	Late_deliver...	Category Id	Category Name	Customer City	Customer C...	Customer E...	Customer Fn...
CASH	0	0	-1088.949951	395.980011	Shipping on time	0	45	Fishing	Winter Park	EE. UU.	XXXXXXXXXX	Helen
CASH	0	0	-854.960022	379.980011	Shipping on time	0	45	Fishing	Buena Park	EE. UU.	XXXXXXXXXX	Dylan
CASH	0	0	-652.7700195	383.980011	Shipping on time	0	45	Fishing	West Haven	EE. UU.	XXXXXXXXXX	Samantha
CASH	0	0	-595.1699829	383.980011	Shipping on time	0	45	Fishing	Princeton	EE. UU.	XXXXXXXXXX	Sarah
CASH	0	0	-594.9699707	339.980011	Shipping on time	0	45	Fishing	Caguas	Puerto Rico	XXXXXXXXXX	Mary
CASH	0	0	-443.6300049	260.9599915	Shipping on time	0	17	Cleats	Caguas	Puerto Rico	XXXXXXXXXX	Jennifer

## 4.Data Preparation:

Preparing the data for visualization involves cleaning the data to remove irrelevant or missing data, transforming the data into a format that can be easily visualized, exploring the data to identify patterns and trends, filtering the data to focus on specific subsets of data, preparing the data for visualization software, and ensuring the data is accurate and complete

### 4.1Prepare the data for Visualization:

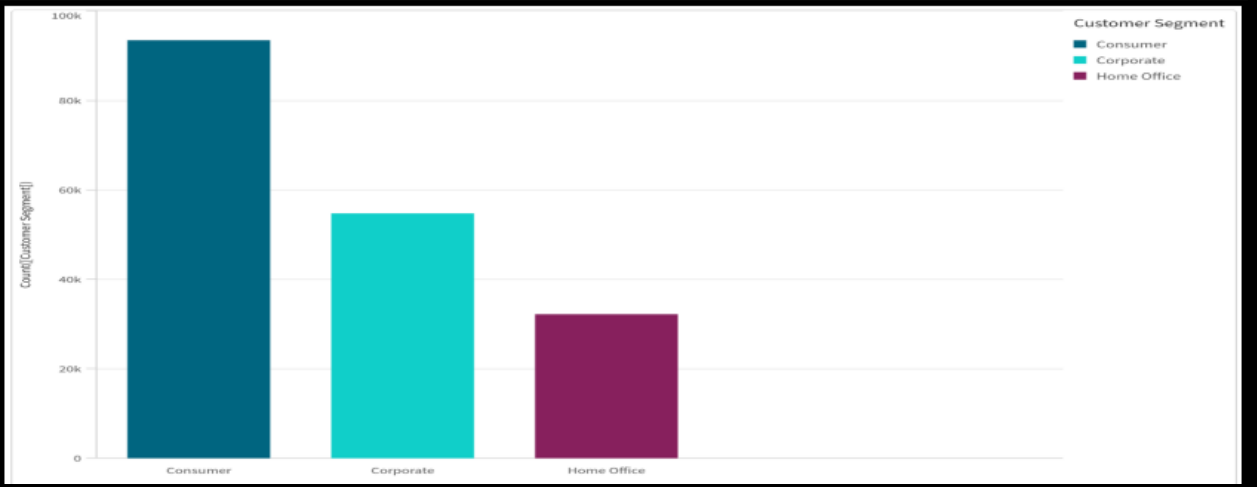
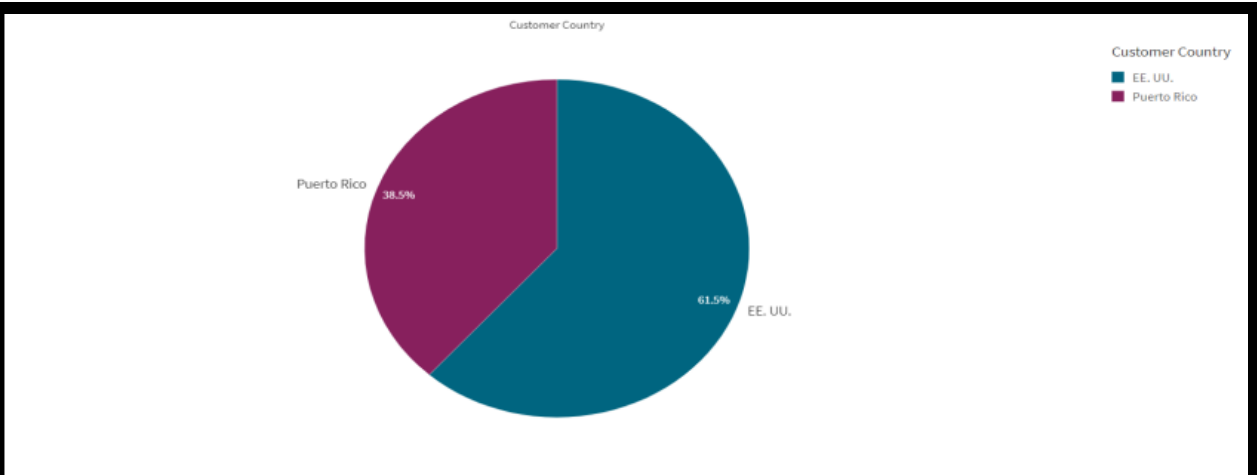
The preparation of data visualization is the process that helps to make the data easily understandable and ready for creating visualizations to gain insights into performance and efficiency. Since the data is already cleaned, we can move to visualization.

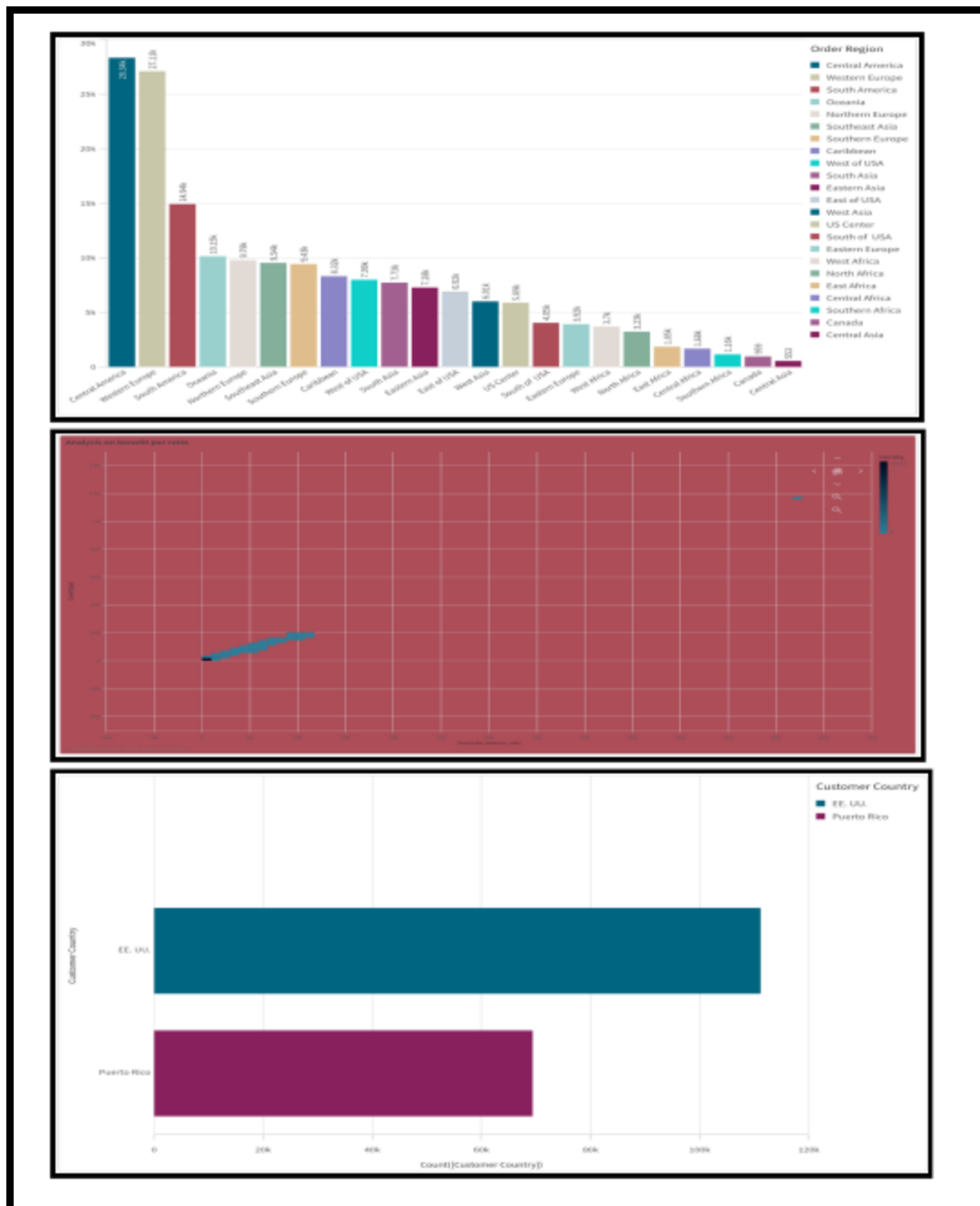
## 5.Data Visualization:

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyse the performance and efficiency of banks include bar charts, line charts, heat maps, scatter plots, pie charts, Maps, etc.

### 5.1Visualization:

These visualizations can be used to compare performance, track changes over time, show distribution and relationships between variables, breakdown of revenue and customer demographics, workload, resource allocation, and location of banks.





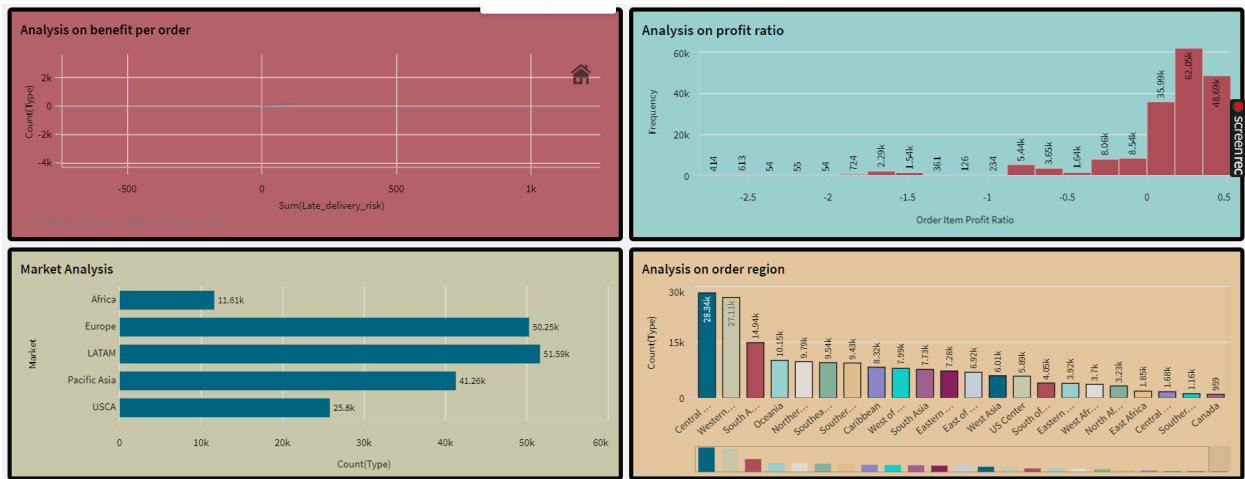
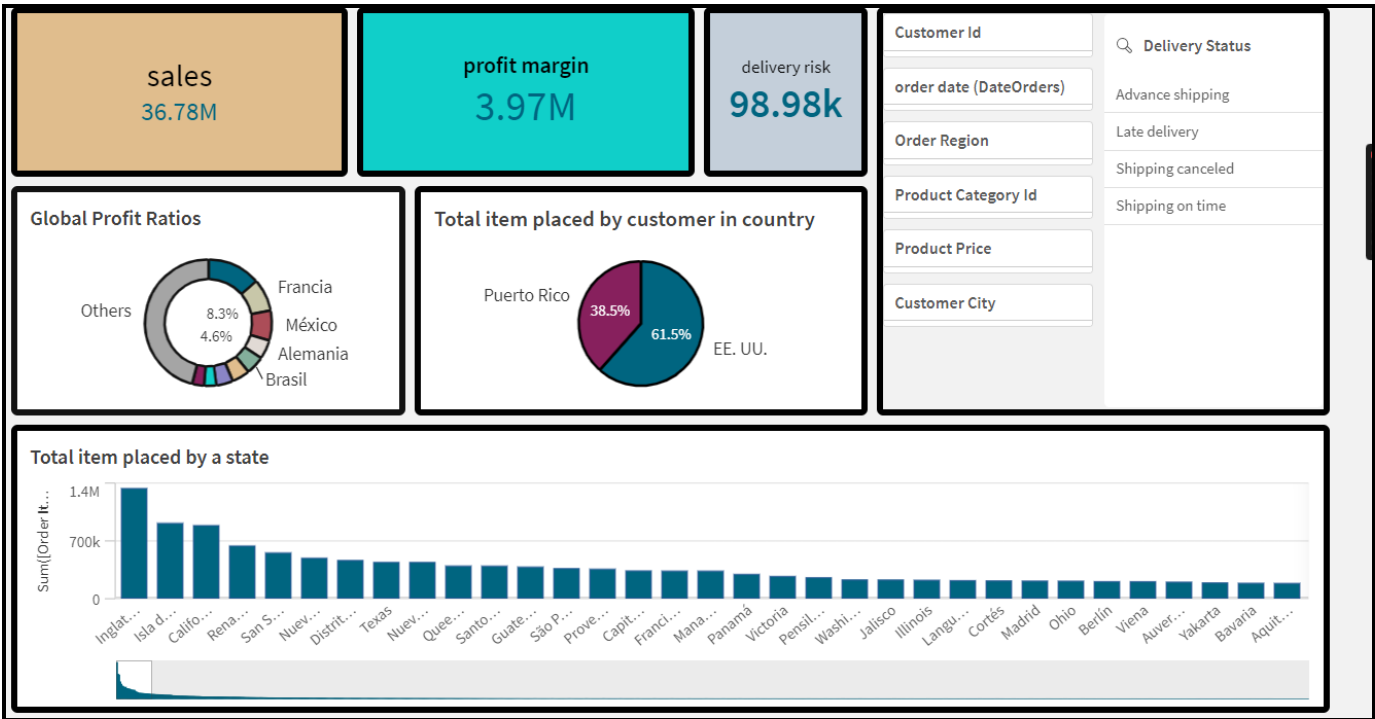
## 6.Dahboard:

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries.

### 6.1Response and design of Dashboard:

Dashboard can be used to track key performance indicators (KPIs), monitor

performance metrics, and display data in the form of charts, graphs, and tables



### 7 STORY:

A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos

### Supply chain Management in Analysis story.

**Sales**  
36.78M

**Profit Margin**  
3.97M

- ★ No. of sales done in Asian Country
- ★ No. of sales done in US Country

- ★ Profit margin in Asian country
- ★ Profit margin in US country

**Delivery Risk**  
98.98k

◀ Total number of delivery risks in US and Asian countries

Global profit ratio ▶

